

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A pressure vessel liner comprising:

a tubular trunk having end openings at opposite ends of the trunk;

a plurality of head plates joined to the trunk at the opposite ends and closing the end openings of the trunk, respectively; and

a reinforcing member fixedly provided in an interior space formed by the trunk and the head plates, the reinforcing member [[and]] dividing the interior space into a plurality of spaces, wherein:

the reinforcing member is fixedly provided on an inner peripheral surface of the trunk, and comprises a plurality of reinforcing walls extending from the inner peripheral surface of the trunk toward the center line of the trunk and joined to one another on the center line, and

the head plates are joined to the reinforcing member by friction agitation, at least one of the head plates is in the form of an outwardly bulging dome, and the reinforcing member has an end portion which projects beyond the trunk and is fitted to the form of the outwardly bulging dome of the at least one of the head plates.

Claim 2 (Currently Amended): A pressure vessel liner according to claim 1 wherein the combined length of joints between each of the head plates and the reinforcing member is at least 60% of the combined length of portions of the reinforcing member in contact with [[an]] the inner surface of the head plate.

Claim 3 (Canceled).

Claim 4 (Original): A pressure vessel liner according to claim 1 wherein the head plates are formed separately from the trunk and are joined respectively to opposite ends of the trunk.

Claim 5 (Original): A pressure vessel liner according to claim 1 wherein one of the head plates is formed integrally with one end of the trunk and the other head plate is formed separately from the trunk and joined to the other end of the trunk.

Claim 6 (Canceled).

Claim 7 (Previously Presented): A pressure vessel liner according to claim 1 wherein one of the head plates has a flat inner surface.

Claim 8 (Currently Amended): A process for fabricating a pressure vessel liner, comprising:

extruding a tubular trunk having open ends at opposite ends;

forming two head plates at least one of which is in the form of an outwardly bulging dome, the head plates being configured to be joined to the trunk at the opposite ends and close the open ends of the trunk, respectively;

extruding a reinforcing member configured to divide an interior space formed by the trunk and the head plates into a plurality of spaces, the reinforcing member having an end portion which is configured to project beyond the trunk and is fitted to the form of the outwardly bulging dome;

inserting the reinforcing member into the trunk such that the end portion of the reinforcing member projects beyond the trunk and is fitted to the form of the outwardly bulging dome of the at least one of the head plates;

joining the trunk to the reinforcing member such that an outer edge of the reinforcing member is in contact with an inner surface of the trunk and comprises a plurality of reinforcing walls joined to one another on the center line of the trunk;

joining the two head plates respectively to the opposite ends of the trunk; and

joining the two head plates to the reinforcing member by friction agitation from outside the head plates.

Claim 9 (Original): A process for fabricating a pressure vessel liner according to claim 8 wherein the trunk is joined to the reinforcing member by friction agitation from outside the trunk.

Claim 10 (Currently Amended): A process for fabricating a pressure vessel liner according to claim 8 wherein one of the head plates is formed by forging and an outwardly extending projection is formed on an outer surface of said one head plate integrally therewith when said one head plate is formed by forging, ~~and which includes the process further~~ comprising providing a mouthpiece portion by forming a through bore extending from an outer end face of the projection to an inner surface of said one head plate after joining the two head plates respectively to the opposite ends of the trunk and joining the two head plates to the reinforcing member.

Claim 11 (Canceled).

Claim 12 (Currently Amended): A process for fabricating a pressure vessel liner comprising:

extruding a tubular trunk having open ends at opposite ends and a reinforcing member dividing an interior space of the trunk into a plurality of spaces in the form of an integral assembly such that the reinforcing member is joined to an inner peripheral surface of the trunk, and comprises a plurality of reinforcing walls extending from the inner peripheral surface of the trunk toward the center line of the trunk and joined to one another on the center line, the reinforcing member having an end portion projecting beyond the trunk and configured to be fitted to the form of an outwardly bulging dome of at least one of head plates configured to be joined to the trunk at the opposite ends and close the open ends of the trunk, respectively;

forming two head plates at least one of which is in the form of the outwardly bulging dome, the head plates being configured to be joined to the trunk at the opposite ends and close the open ends of the trunk, respectively;

joining the two head plates respectively to the opposite ends of the trunk such that the end portion of the reinforcing member is fitted to the form of the outwardly bulging dome of the at least one of the head plates; and

joining the two head plates to the reinforcing member by friction agitation from outside the head plates.

Claim 13 (Currently Amended): A process for fabricating a pressure vessel liner according to claim 12 wherein one of the head plates is formed by forging and an outwardly extending projection is formed on an outer surface of said one head plate integrally therewith when said one head plate is formed by forging, ~~and which includes~~ the process further comprising providing a mouthpiece portion by forming a through bore extending from an

outer end face of the projection to an inner surface of said one head plate after joining the two head plates respectively to the opposite ends of the trunk and joining the two head plates to the reinforcing member.

Claim 14 (Canceled).

Claim 15 (Currently Amended): A process for fabricating a pressure vessel liner, comprising:

forming a tubular trunk having open ends at opposite ends and a head plate closing one of the open ends of the trunk by forging in the form of an integral assembly;

forming a head plate configured to close the other open end of the trunk, at least one of the head plates being in the form of an outwardly bulging dome,

extruding a reinforcing member configured to divide an interior space formed by the trunk and the head plates into a plurality of spaces, the reinforcing member having an end portion which is configured to project beyond the trunk and is fitted to the form of the outwardly bulging dome;

inserting the reinforcing member into the trunk such that the end portion of the reinforcing member projects outward beyond the trunk and is fitted to the form of the outwardly bulging dome of the at least one of the head plates;

joining the trunk to the reinforcing member such that an outer edge of the reinforcing member is in contact with an inner surface of the trunk and comprises a plurality of reinforcing walls joined to one another on the center line of the trunk;

joining the head plate formed separately from the trunk to the other end of the trunk;
and

joining the two head plates to the reinforcing member by friction agitation from outside the head plates.

Claim 16 (Currently Amended): A process for fabricating a pressure vessel liner according to claim 15 wherein when the integral assembly of the trunk and the head plate is formed by forging, an outwardly extending projection is formed on an outer surface of the head plate integrally therewith, ~~and which includes~~ the process further comprising providing a mouthpiece portion by forming a through bore extending from an outer end face of the projection to an inner surface of the head plate after joining the head plate formed separately from the trunk to the other end of the trunk and joining the two head plates to the reinforcing member.

Claim 17 (Currently Amended): A process for fabricating a pressure vessel liner according to claim 15 wherein the head plate for closing the other open end of the trunk is formed by forging, and an outwardly extending projection is integrally formed on an outer surface of the head plate to be formed by forging, ~~and which includes~~ the process further comprising providing a mouthpiece portion by forming a through bore extending from an outer end face of the projection to an inner surface of the head plate after joining the head plate formed separately from the trunk to the other end of the trunk and joining the two head plates to the reinforcing member.

Claim 18 (Original): A process for fabricating a pressure vessel liner according to claim 15 wherein the trunk is joined to the reinforcing member by friction agitation from outside the trunk.

Claim 19 (Canceled).

Claim 20 (Previously Presented): A pressure vessel comprising a pressure vessel liner according to claim 1 which is covered with a fiber reinforced resin layer over an outer peripheral surface thereof.

Claim 21 (Original): A fuel cell system comprising a fuel hydrogen pressure vessel, a fuel cell and pressure piping for delivering fuel hydrogen gas from the pressure vessel to the fuel cell therethrough, the fuel hydrogen pressure vessel comprising a pressure vessel according to claim 20.

Claim 22 (Original): A fuel cell motor vehicle having installed therein a fuel cell system according to claim 21.

Claim 23 (Original): A cogeneration system comprising a fuel cell system according to claim 21.

Claim 24 (Original): A natural gas supply system comprising a natural gas pressure vessel and pressure piping for delivering natural gas from the pressure vessel therethrough, the natural gas pressure vessel being a pressure vessel according to claim 20.

Claim 25 (Original): A cogeneration system comprising a natural gas supply system according to claim 24, a generator and a generator drive device.

Claim 26 (Original): A natural gas motor vehicle comprising a natural gas supply system according to claim 24 and an engine for use with natural gas as a fuel.